

CLAIMS

What is claimed is:

1. A method for Short Message Services (SMS) provisioning in a system including a Home Location Register (HLR), a Message Center (MC), and a Mobile Switching Center (MSC) including a Mobile Switching Center point code scheme, comprising the steps of:
 - storing location data for said MSC in said HLR;
 - receiving a request from said MC to deliver a SMS message to said MSC;
 - determining a MC point code scheme for said MC;
 - comparing the MC point code scheme with the MSC point code scheme;
 - populating said SMS message with the MSC point code scheme if the MSC and MC point code schemes are the same; and
 - delivering said SMS message from said MC to said MSC.

1 2. A method for Short Message Services (SMS) provisioning in a system
2 including a Home Location Register (HLR), a Message Center (MC), a Mobile Switching
3 Center (MSC), including a Mobile Switching Center point code scheme, comprising the steps
4 of:
5 storing location data for said MSC in said HLR, wherein said location data
6 includes at least one Mobile Switching Center Identification Number (MSCIN) parameter;
7 receiving a request from said MC to deliver a SMS message to said MSC;
8 determining a MC point code scheme for said MC;
9 comparing the MC point code scheme with the MSC point code scheme;
10 populating said SMS message with the MSC point code scheme if the MSC
11 and MC point code schemes are the same;
12 otherwise, populating said SMS message with the MSCIN parameter; and
13 delivering said SMS message from said MC to said MSC.

1 3. A method for Short Message Services (SMS) provisioning in a system
2 including a Home Location Register (HLR), a Message Center (MC), a Mobile Switching
3 Center (MSC), including a Mobile Switching Center point code scheme, comprising the steps
4 of:

5 storing location data for said MSC, wherein said location data includes a SMS
6 address in said HLR and wherein said location data does not contain a MSCIN parameter;
7 receiving a request from said MC to deliver a SMS message to said MSC;
8 determining a MC point code scheme for said MC;
9 comparing the MC point code scheme with the MSC point code scheme;
10 populating said SMS message with the MSC point code scheme if the MSC
11 and MC point code schemes are the same; and
12 delivering said SMS message from said MC to said MSC.

1 4. The method of Claim 2, wherein the MSCIN parameter is in Global
2 Title Address (GTA) format.

1 5. The method of Claim 4, wherein said GTA format uses an E.212
2 identifier.

1 6. The method of Claim 4, wherein said GTA format uses an E.164
2 identifier.

1 7. The method of Claim 4, wherein said GTA format uses a combination
2 of said E.212 and E.164 identifiers.

1 8. The method of Claim 1, wherein said HLR has a database including at
2 least one country code and at least one corresponding point code scheme.

1 9. The method of Claim 8, wherein said point code scheme is specified
2 according to American National Standards Institute (ANSI) standard-41.

1 10. The method of Claim 8, wherein said point code scheme is specified
2 according to International Telecommunication Union (ITU) standard Q.700.

1 11. The method of Claim 8, wherein the step of comparing the MC point
2 code scheme with the MSC point code scheme occurs in said database in said HLR.

1 12. The method of Claim 1, wherein the step of determining the MC point
2 code scheme further includes the step of determining a nationality of the MC.

1 13. A node for determining whether a Message Center (MC) and a Mobile
2 Switching Center (MSC) share a common point code, comprising:
3 a memory including a database having a plurality of point code schemes and a
4 corresponding plurality of country codes.

1 14. The node of Claim 13 wherein the node is a Home Location Register (HLR).

09/27/2004 10:50 AM